

Amendments to the Specification:

Please amend the Specification on Page 9 (Lines 26 – 32) as follows:

The fibers of the lobes 38 and outer layer 40 create a damage tolerant shaft 30 with considerable strength in the direction that the fibers 38, 40 are wound. To provide additional strength to the damage tolerant shaft 30, additional reinforcing fibers oriented in a direction that is perpendicular to the axis about which the annular body is symmetrical may extend through the rib portion of the lobes ~~[[38]]~~ 32. Since the composite material is typically a preform, all of the fibers of the lobes 32 are preferably impregnated and cured simultaneously.

Please amend the Specification on Page 10 (Lines 31, 32), Page 11 (Lines 1 – 32) and Page 12 (Lines 1 – 7) as follows:

Torque loading on a drive shaft creates internal shear stresses in the drive shaft and these stresses prefer to flow around the outermost closed path. Figure 4 illustrates the flow of the internal sheer stresses 46 around the outside closed path of an undamaged drive shaft ~~[[40]]~~ 41 with four internal ribs 42 and lobes 44 that is driving the rotation of a rotatable member and, thus, carrying torque.

The internal ribs 42 and lobes 44 provide damage tolerance to the drive shaft ~~[[40]]~~ 41 by increasing the likelihood that a closed section will still be defined by the drive shaft if a portion of the outer wall of the shaft is damaged. Figure 5 shows a damaged drive shaft ~~[[40]]~~ 41 with a damaged portion 50. Although a portion of the outer wall of the shaft ~~[[40]]~~ 41 and one of the ribs (or two of the lobes) are damaged such that a gap is now defined in the outer wall and one of the ribs is no longer directly connected to the outer wall, the internal sheer stresses 48 nevertheless have a closed path in which to flow. The closed path provided by the undamaged ribs or lobes is significantly stronger than an open portion of the shaft and, as such, the drive shaft can operate longer than a shaft with an open portion. Thus, the damage tolerant shaft ~~[[40]]~~

41 is safer for everyone in and around the vehicle when the damage occurs because the damage tolerant shaft 41 is more likely to operate at least long enough to land or halt the vehicle.

Figure 6 depicts the drive shaft 41 having extensive damage to a large portion 54 of the outer wall of the shaft and two of the ribs (or three of the lobes). As shown, a relatively large gap is now defined in the outer wall and two ribs are no longer directly connected to the outer wall. The internal sheer stresses 52, however, still flow around a closed path. Thus, as long as at least two undamaged ribs remain connected to an undamaged portion of the outer wall of the drive shaft or at least one lobe is undamaged, the internal sheer stresses can flow around a closed path, which increases the likelihood that the damaged drive shaft will operate at least long enough to get the vehicle to safety.

Furthermore, the internal ribs 42 or lobes 44 provide damage tolerance for the drive shaft 41 without increasing the radius, wall thickness or weight of the drive shaft. Because the internal ribs or lobes create a stronger undamaged drive shaft, in addition to a stronger damaged drive shaft, the outer wall thickness of the damage tolerant shaft does not need to be as thick as the outer wall of a hollow drive shaft to carry the same amount of torque. Thus, when designed to carry the same amount of torque for the same vehicle, the weight of the damage tolerant shaft is no more than the weight of a hollow drive shaft. Additionally, because of the internal rib or lobe design of the damage tolerant drive shaft, it is not necessary for the damage tolerant drive shaft to have a larger radius than the radius of a hollow drive shaft carrying the same amount of torque for the same vehicle. In fact, the radius of the damage tolerant drive shaft may be smaller than that of a hollow drive shaft, designed to carry the same amount of torque for the same vehicle, due to the added strength provided to the undamaged and damaged drive shaft by the internal ribs or lobes.